the sows in better condition and in consequence the pigs are in better

condition at weaning time.

Some garbage feeders who purchase their pigs have rather heavy losses while getting them on garbage. It is recommended that, when pigs are purchased, the change from their accustomed grain feeds to garbage be made very gradually, taking as long as four weeks to complete the substitution. An abrupt change of feed is apt to produce digestive troubles that may be fatal to some of the pigs.

It probably is best to have concrete feeding floors (fig. 115), if prac-A floor of this kind is more easily kept elean than a wooden floor, but the latter is desirable under certain conditions. For instance. when garbage is fed in fields of eonsiderable size on which various farm crops are produced, wooden platforms are necessary. The feeding platform of wood is movable and may be hauled from field to field.

Refuse is Valuable Fertilizer

The refuse from the garbage after the hogs have finished eating is plowed under, and makes a valuable fertilizer. The same care and attention should be given to sows during the gestation and suckling period, when fed on garbage, that is given to those fed in any other Some garbage plants pay little or no attention to the comfort of the sows during these periods. This neglect results in a small number of pigs per sow, which are weaned at very light weights and consequently are not in condition to go on feed and make profitable gains.

E. Z. Russell.

OG Feeding to Avoid Soft Pork and Lard

Softness in pork and pork products—that condition which, when it exists, is disagreeable to so many consumers—is of real coneern to several other classes of people. These include the farmer, the packer, and the dealer. The farmer's

interest, of course, is primary, and the one under consideration here. He produces the pork and is the first to feel the effects of the public disapproval or approval of the quality of his product. When suspected of softness, hogs are usually bought by the packer at a reduced price, or at least purchased subject to

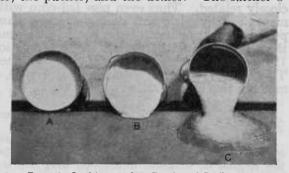


Fig. 116.-Lard from A, firm; B, soft; and C, oily carcasses

cooler test of the chilled eareasses. If the latter are found to be soft,

settlement is made on a soft-hog basis.

There has been a lack of knowledge of the different factors responsible for softness in hogs and their products (fig. 116) and of the exact conditions under which softness develops. There is still need for much more information on these questions. To develop additional facts the United States Department of Agriculture and a number of the State experiment stations are continuing cooperative investigations which have been in progress for several years.

On the other hand, there is now available to the farmer considerable authentic information which can be of much value to him. For example, there is no question as to the softening effects of soy beans, peanuts, rice bran, and rice polish. Excepting soy beans these feeds are ordinarily fed as the principal feed in the ration. As such they produce softness in the carcass under all usual conditions. Soy beans, though possessing distinct softening influence, are best fed as a supplement to corn or other starchy concentrates, which are hardening.

Feed, Weight, and Rate of Gain

In consequence the question of the influence of different proportions of the softening and hardening feeds in a ration immediately arises. It is known that pigs weighing approximately 100 pounds can not be fattened on a 2.5 per cent ration of shelled corn with soy beans grazed or self-fed without producing soft carcasses. In fact, a combination of corn and soy beans containing 25 per cent of soy beans has consistently produced soft carcasses under carefully controlled conditions with pigs weighing up to 130 pounds in starting weight and gaining approximately 100 pounds on the corn-soy-bean ration. Even a 6 to 1 mixture of the two feeds, which contains but 14.3 per cent of soy beans, has shown itself to be softening under certain conditions. One condition is when the initial weights are not over 90 pounds and the daily gain not more than 1 pound through any feeding period up to about 100 days.

Fortunately, however, when this same 6 to 1 mixture is fed to pigs starting at 115 pounds or more and gaining not less than 1.5 pounds daily for a minimum of 70 days firm carcasses are produced. This is one illustration of the fact that when properly used with

corn, soy beans will not induce softness in hogs.

It is significant that softness and immaturity or lack of finish are closely related. Thus even pigs fed corn with nonsoftening supplements usually yield soft carcasses when slaughtered at about 100 pounds weight or less. However, with increase in weight and finish there is a gradual hardening on such a ration. At weights above 125 pounds carcasses of satisfactory firmness are usually found. This applies to hogs of medium to large type, as do other statements made in this article.

Brewers' Rice a Valuable Hardening Feed

Hardening of hogs previously fed on softening feeds ordinarily is accomplished somewhat slowly. Much depends, of course, upon the degree of softness developed and the weight and finish when hardening is begun. Helpful information is available on various phases of this question.

Brewers' rice is a producer of extremely firm hogs. It possesses great possibilities as a hardening feed and as a supplement to soften-

ing feeds. The feeding value is high.

The above facts show the kind of information which has been and still is being worked out for the benefit of the swine producer. It will enable him to produce hogs of high quality which meet market requirements and which will not be subject to price discriminations.